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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Young Hoon ROH et al. Confirmation No. : 4046

Appl. No. : 10/679,481 Examiner : T. Hussain

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For : HOME NETWORK SYSTEM FOR GENERATING RANDOM NUMBER AND METHOD FOR CONTROLLING THE SAME

RESPONSE UNDER 37 C.F.R. §1.116

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop AF
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir :

In response to the Final Office Action of March 6, 2008, in which a three-month shortened statutory period for response was set to expire on June 6, 2008, Applicants respectfully request reconsideration and withdrawal of the outstanding objection and rejections, in view of the herein-contained amendments and remarks.

Amendments to the Specification begin at page 2.
Amendments to the Claims begin on page 3.
Remarks begin on page 8.

IN THE SPECIFICATION

Please add the following paragraph to the specification between the paragraph ending at page 5, line 17 and the paragraph beginning at page 5, line18 of the specification:

--In accordance with another aspect of the present invention, the home server appliance may further include a control command input unit for receiving the control command for the client appliance; and a control result output unit for outputting control state information if the control state information is received from the client appliance.--

IN THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims replaces all previous versions and listings of claims in the present application.

Claims 1-9. (Cancelled)

10. (Currently Amended) A home server appliance, comprising:

a microcomputer configured to determine whether a manufacturer's serial number for a first client appliance operatively connected to a home network is equal to an identification of a second client appliance operatively connected to the home network; and

a random number generator configured to generate a random number when ~~a~~ the manufacturer's serial number for ~~a~~ the first client appliance operatively connected to ~~a~~ the home network is equal to ~~an~~ the identification of ~~a~~ the second client appliance operatively connected to the home network, and to assign the random number as an identification of the first client appliance.

11. (Currently Amended) The home server appliance of claim 10, further comprising:

a database configured to store the identification of the first client appliance and the identification of the second client appliance;

~~a random number generator configured to generate the random number when the manufacturer's serial number for the first client appliance is equal to the identification of the second client appliance as previously stored in the database; and~~

wherein the ~~a~~ microcomputer is configured to access the database and the random number generator and to assign the random number as the identification of the first client appliance.

12. (Previously Presented) The home server appliance of claim 10,

wherein the home server appliance is further configured to provide to the first client appliance based on the identification of the first client appliance a control command to control the first client appliance.

13. (Previously Presented) The home server appliance of claim 12, further comprising:

a control command unit configured to receive the control command; and

a control result output unit configured to output control state information when the control state information is received from the first client appliance.

14. (Previously Presented) The home server appliance of claim 10,

wherein a home server communication module is configured to convert a format of data communicated between the home server appliance and the home network.

15. (Previously Presented) The home server appliance of claim 14, wherein the home server communication module comprises:

a memory configured to store address information of the home server appliance on the home network;

a modem configured to convert data to be communicated between the home server appliance and the home network into a format based on an appropriate protocol; and a modem controller configured to control the modem.

16. (Currently Amended) A first client appliance operatively connected to a home network~~, the first client appliance being~~ and configured to provide a manufacturer's serial number for the first client appliance to a home server appliance,

wherein the home server appliance ~~which~~ is configured to determine whether the manufacturer's serial number for the first client appliance is equal to an identification of a second client appliance operatively connected to the home network, and

wherein the home server appliance is configured to generate and assign a random number as an identification of the first client appliance when the manufacturer's serial number is equal to ~~an~~ the identification of ~~a~~ the second client appliance operatively connected to the home network.

17. (Previously Presented) The first client appliance of claim 16,

wherein a client communication module is configured to convert a format of data to be communicated between the first client appliance and the home network.

18. (Previously Presented) The first client appliance of claim 17, wherein the client communication module comprises:

a memory configured to store information of the identification of the first client appliance;

a modem configured to convert data to be communicated between the first client appliance and the home network into a format based on an appropriate protocol; and a modem controller configured to control the modem.

19. (Previously Presented) The first client appliance of claim 16,

wherein the first client appliance is further configured to receive from the home server appliance based on the identification of the first client appliance a control command to be controlled by the home server appliance.

20. (Currently Amended) A method for controlling a home network system, comprising:

receiving at a home server appliance, from a first client appliance operatively connected to a home network, information of a manufacturer's serial number for the first client appliance;

determining whether the manufacturer's serial number for the first client appliance is equal to an identification of a second client appliance operatively connected to the home network;

generating a random number at the home server appliance when ~~a~~ the manufacturer's serial number for the first client appliance is equal to ~~an~~ the identification of ~~a~~ the second client appliance operatively connected to the home network, and

assigning at the home server appliance the random number as an identification of the first client appliance.

21. (Previously Presented) The method of claim 20, further comprising:

providing from the home server appliance to the first client appliance, using the identification of the first client appliance, a control command to control the first client appliance.

22. (Previously Presented) The method of claim 20, further comprising:

providing from the home server appliance to the first client appliance an access signal, before receiving at the home server appliance from the first client appliance the information of the manufacturer's serial number.

23. (Currently Amended) The method of claim 20, further comprising:

comparing at the home server appliance the manufacturer's serial number of the first client device with the identification of the second client appliance;

when the manufacturer's serial number of the first client device is equal to ~~an~~ the identification of the second client appliance, generating the random number and assigning the random number as the identification of the first client appliance; and

when the manufacturer's serial number is not equal to an identification of any other client appliance operatively connected to the home network, assigning the manufacturer's serial number as the identification of the first client appliance.

24. (Previously Presented) The method of claim 21,

wherein the identification of the first client appliance is stored in a client communication modem operatively connected to the first client appliance.

REMARKS

Initially, Applicants note that the new Final Office Action still does not acknowledge Applicants' claim for foreign priority under 35 U.S.C. §119, or receipt of a certified copy of the priority document upon which Applicants' claim for foreign priority is based. In this regard, Applicants' filed a formal Claim of Priority along with a certified copy of Korean Patent Application No. 10-2002-0061855 on October 7, 2003. Accordingly, with the next Final Office Action, Applicants request that the Examiner acknowledge Applicants' claim for foreign priority under 35 U.S.C. §119, as well as receipt of the certified copy of the priority document upon which Applicants' claim for foreign priority is based.

In the outstanding Final Office Action, the specification was objected-to as failing to provide proper antecedent basis for the claimed subject matter. Claims 10 and 11 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 10-11 of copending, commonly assigned U.S. Patent Application Publication No. 2005/0232301 (U.S. Patent Application No. 10/896,870). Claims 10-24 were rejected under 35 U.S.C. §103(a) over CHIU (U.S. Patent No. 6,647,402) in view of HUMPLEMAN (U.S. Patent No. 7,103,834).

Applicants traverse the objection to the specification. In this regard, the objected-to subject matter of the claim was originally presented explicitly in claim 3. Further, an exemplary embodiment of the present application shown in Figure 3 explicitly discloses a control command input unit and a control result output unit. Accordingly, antecedent basis is already present for the objected-to subject matter of the pending claims. Nevertheless, upon entry of the present amendment, Applicants will have added a paragraph to the Summary of the Invention. The added paragraph corresponds to the features originally presented explicitly in claim 3.

Accordingly, reconsideration and withdrawal of the objection to the specification is respectfully requested.

Applicants traverse the provisional double patenting rejection. In this regard, claims 10 and 11 of U.S. Patent Application No. 10/896,870 (U.S. Patent Application Publication No. 2005/0232301) were amended in a Response filed on March 31, 2008. Further, claims 10 and 11 of the present application have been amended by the present Response. Accordingly, the final form of claims has not necessarily been determined for either application, and the provisional double-patenting rejection is premature.

Additionally, the provisional double patenting rejection would not be appropriate even if the claims of either application were not amended. In this regard, the Office Action mischaracterizes claims 10-11 of the present application as including a comparison of "addresses". However, the noted claims of the present application are not directed to features of comparing addresses, or doing anything based on such a comparison of addresses. The noted claims of the present application relate to manufacturer's serial numbers. Claims 10 and 11 of U.S. Patent Application No. 10/896,870 do not recite any features relating to manufacturer's serial numbers. Indeed, claims pending in U.S. Patent Application No. 10/896,870 do not include any features relating to any type of device serial number, whether an original manufacturer's serial number or a later assigned serial number.

As described above, claims 10-11 of the present application would not be obvious to one of ordinary skill in the art reviewing claims 10 and 11 of U.S. Patent Application No. 10/896,870). Accordingly, reconsideration and withdrawal of the provisional double-patenting rejection is respectfully requested.

Applicants traverse the rejection under 35 U.S.C. §103. In this regard, various of the claims of the present application will have been amended upon entry of the present Response. The herein-contained amendments to the claims should not be considered an indication of Applicants' acquiescence as to the propriety of the outstanding rejections. Rather, Applicants have amended the claims in order to advance prosecution and obtain early allowance of claims.

According to amended claim 10, a home server appliance includes a microcomputer configured to determine whether a manufacturer's serial number for a first client appliance operatively connected to a home network is equal to an identification of a second client appliance operatively connected to the home network. The home server appliance further includes a random number generator configured to generate a random number when the manufacturer's serial number for the first client appliance operatively connected to the home network is equal to the identification of the second client appliance operatively connected to the home network. The random number generator is further configured to assign the random number as an identification of the first client appliance.

In the "Background of the Invention" at column 1, lines 14-33, CHIU describes a first set of problems in using a fixed serial number on devices of the same kind, and a second set of problems in generating and storing unique serial numbers for devices. However, the solution in CHIU is to generate a serial number for use based on a seed number and then check whether the serial number is repeated in a bus. CHIU further describes that the seed number may be any of the serial number corresponding to any of the devices of the same kind in the bus.

CHIU does not disclose the combinations recited in the pending claims. In this regard, CHIU does not disclose, either expressly or inherently, that serial numbers used as seed numbers are the manufacturer's serial numbers. Rather, CHIU discloses that the serial numbers used as seed numbers are the "serial numbers corresponding to any of the devices of the same kind in the bus". The problem with using "a fixed serial number on devices of the same kind" is not described at column 1, lines 14-33 as a problem with the manufacturer's serial numbers. Rather, the origin of this problem is not expressly described in detail, and may be a problem originating with a the controller of the bus on which devices of the same kind are connected, such as when the controller of the bus assigns a fixed serial number on devices of the same kind. Thus, CHIU does not disclose, expressly or inherently, that a fixed serial number on devices of the same kind is the manufacturer's serial number, as in the pending claims.

Additionally, in CHIU, the determination of conflict is explicitly disclosed as only a determination as to whether the newly-generated serial number for use conflicts with another on the same bus. As described at column 1, lines 37-43, CHIU "first generates the serial number for use from random number based on a seed number, it then checks whether the serial number for use is repeated on the bus" (emphasis added) and "[i]f the generated serial number for use repeats the serial number corresponding to any other devices of the same kind in the bus, a new serial number for use is generated". Further, as shown in Figure 1 and described at column 2, lines 15-40, "step 130 determines if the serial number for use obtained from step 120 repeats the serial number of the other devices of the same kind".

Thus, there is no explicit disclosure in CHIU of a determination relating to a manufacturer's serial number, and such a determination is not inherent. Moreover, CHIU does not generate a random number when a conflict in manufacturer's serial numbers is present. Rather, CHIU generates a random number from a seed number at step 110, generates a serial number at step 120, and makes the determination as to conflict of the newly-generated serial number at step 130.

As described above, CHIU does not disclose or suggest numerous of the features of amended claim 10. Further, HUMPLEMAN does not disclose or suggest these features, nor does the Final Office Action apply HUMPLEMAN as disclosing these features. The combination of CHIU and HUMPLEMAN similarly fails to disclose, suggest or render obvious the combinations of features recited in claims 16 and 20. Accordingly, each of claims 10, 16 and 20 is allowable over CHIU in view of HUMPLEMAN, whether considered alone or in any proper combination. Further, claims 11-15, 17-19 and 21-24 are allowable at least for depending, directly or indirectly, from an allowable independent claim, as well as for additional reasons related to their own recitations. Therefore, Applicants respectfully request reconsideration and withdrawal of each of the outstanding objection and rejections.

Any amendments to the claims in this Reply, which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,
Young Hoon ROH et al.

Joshua M. Povsner

Joshua M. Povsner
Reg. #42,086

Bruce H. Bernstein
Reg. No. 29,027

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GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191